

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677,347	10/02/2000	Dieter Weidhaus	WEIDHAUS ET AL 1	3543
7590 01/26/2005 COLLARD & ROE, P.C. 1077 Northern Boulevard Roslyn, NY 11576			EXAMINER	
		DOROSHENK, ALEXA A		
			ART UNIT	PAPER NUMBER
• /			1777	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	T				
	Application No.	Applicant(s)			
Office Action Summan	09/677,347	WEIDHAUS ET AL.			
Office Action Summary	Examiner	Art Unit			
The MAILING DATE of this control of	Alexa A. Doroshenk	1764			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1)⊠ Responsive to communication(s) filed on 01 No	ovember 2004.				
2a)☐ This action is FINAL . 2b)☑ This	action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) Claim(s) 1-10 is/are pending in the application. 4a) Of the above claim(s) 9 and 10 is/are withdrawn from consideration. 5) Claim(s) 7 is/are allowed. 6) Claim(s) 1-6 and 8 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary (Paper No(s)/Mail Dai 5) Notice of Informal Pa	te			

Application/Control Number: 09/677,347

Art Unit: 1764

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Lord et al. (5,810,934).

With respect to claims 1 and 3, Lord et al. discloses a reactor comprising:

a pressure supporting enclosure (110);

an inner reactor tube (111) within the enclosure (110), made of material which exhibits high transmission for thermal radiation (col. 2, lines 18-22):

an inlet (123) at the top of the enclosure (110);

an inlet (125) of tubular form (see figure 2) and dividing the reactor ino a heating zone (118) and above that a reactor zone (122);

a gas-distribution device (112, 115, 143) at the bottom of the enclosure (see figure 6);

an outlet (124) at the top of the enclosure (110);

an outlet (114) at the bottom of the enclosure (110);

a heater device (129) with an energy supply (col. 44, lines 20-24); and

wherein the heater device (129) is a radiation source for thermal radiation arranged cylindrically outside of the inner reactor tube (111) without being in direct

Application/Control Number: 09/677,347

Art Unit: 1764

contact with the inner tube (111) (see figure 2) and designed such that is used thermal

radiation to heat the silicon to a reaction temperature (col. 27, line 51- col. 28, line 12).

With respect to claim 2, Lord et al. further discloses wherein a space between the

Page 3

inner tube (111) and the enclosure (11) is provided with insulation (16).

With respect to claims 4 and 5, Lord et al. discloses wherein the heater can emit

radiation with a variety of wavelengths (col. 2, lines 11-17) meeting the wavelengths of

 $0.4 \mu m$ to 900 or 300 μm .

With respect to claim 6, Lord et al. discloses wherein the materials of

construction include silicon carbide (col. 2, lines 18-22).

With respect to claim 8, Lord et al. discloses wherein the reactor is made of inert

material or a component coated with an inert material (col. 2, lines 18-2 and col. 34,

lines 18-24).

Allowable Subject Matter

Claim 7 is allowed. 3.

Response to Arguments

4. Applicant's arguments, see pages 11-15, filed November 1, 2004, with respect to

the rejection(s)of claim(s) 1-6 and 8 under 35 USC 102(b) over Kim et al. have been

fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of

Lord et al.

Application/Control Number: 09/677,347

Art Unit: 1764

Applicant's newly submitted abstract overcomes the objection to the specification made in the previous Office Action.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa A. Doroshenk whose telephone number is 571-272-1446. The examiner can normally be reached on Monday - Thursday from 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alexa A. Doroshenk

Page 4

Examiner Art Unit 1764